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ABSTRACT

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Abstract

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EFFECTS OF PUPIL IMITATION ON MALE AND FEMALE TUTORS

Linda Devin Sheehan and Vernon L. Allen, University of Wisconsin

School tutoring programs that use older students as tutors for younger students have been shown to be at least as beneficial for the tutors as for their tutees (Gartner, Kohler, & Riessman, 1971; Thelen, 1968). Among the benefits found for tutors are gains in academic skills, increased self-esteem, and improved attitudes towards teachers and school. It also has been suggested that the responsibility and status of the teacher role encourages the tutor to behave along more socially desirable lines. Certainly the tutor's perception of his role seems likely to affect the tutor's behavior.

Role theory (Sarbin & Allen, 1968), which has provided a useful theoretical framework for previous tutoring research (Allen & Feldman, 1973, 1974; Feldman & Allen, 1972), again seems helpful in considering the tutor's response to his role. Role theory is concerned with the behavior of an individual occupying a particular position in the social system. The interaction of the student tutor with his tutee is especially interesting in this context because of the tutor's dual roles as student peer and teacher. Accordingly, principles and concepts derived from role theory are valuable to the researcher interested in the peer-tutoring relationship.

One useful concept drawn from this theory is role expectations--those actions and qualities expected of the person who occupies a particular position. For the student enacting the role of teacher, a likely expectation is that he will be a model for his student. A possible approach to determining how this expectation of being a role model

influences the tutor is to vary the extent to which he is imitated by his student and then to measure the effects on his attitudes and behavior.

In previous research, imitation by children has typically been studied in terms of the model's effect on children's imitative behavior (Bandura, 1965; Bryan, 1972). Although it has been amply demonstrated that children do imitate others, there has been almost no research to investigate the effect of children's imitation on the model. Yet there is evidence that apparently less powerful or lower status members of interpersonal systems regularly affect the more powerful or higher status members (Bates, 1972): followers influence leaders; audiences, speakers; patients, therapists; and, not surprisingly, children, parents. Consistent with these findings is the prediction that imitators influence their models, and, in particular, pupils, through imitation, influence their tutors.

One study supporting that prediction (Bates, 1973) had male undergraduates first teach basketball plays to young boys, and then perform a verbal task with them. The boys were, in fact the experimenter's confederates, who on a given signal during the basketball task imitated either completely or not at all the adult models. The college students' positive feelings towards the boys (as expressed verbally and nonverbally) were significantly greater in the imitation than in the nonimitation condition.

The present study, using elementary school age tutors, investigates how different amounts of pupil imitation affects tutors' attitudes and behavior. The major prediction is that increased pupil imitation

will enhance the effect on the tutor of being a model for his pupil and result in desirable attitudinal and behavioral differences in the tutors. More specifically, it was expected that increased imitation would engender in tutors a more favorable attitude towards themselves, tutoring, and the tutee, and that greater imitation would result in the tutor modifying his behavior to provide a better example for his pupil.

A study on ingratiation (Jones, Jones, & Gergen, 1963) found that adults prefer individuals who conform moderately to those who conform a great deal. Therefore, three levels of imitation--Low, Medium and High--were included in the study to determine if children might respond most favorably to moderate imitation.

In addition to imitation, amount of pupil liking for the tutor was manipulated to be either Medium or High. Imitation normally would imply liking, so without this control, results would not be subject to clear interpretation. It was expected that increased liking would have effects on the tutors' attitudes similar to those of imitation, and the present design permits examination both of the individual effects of imitation and liking and of their interaction.

Method

Subjects

Subjects who served as tutors were 72 randomly selected sixth-grade students, 36 males and 36 females. Data were not obtained from six tutors due to absenteeism of either the tutor or his tutee, and the data from one tutor were unusable due to a procedural error. Thus, results are based on data from 65 tutors.

The tutees who were taught by the subjects serving as tutors were 72 second-grade students (36 males and 36 females). Teachers selected children as tutees who could benefit most from individual help in learning to read sight words. These younger students ranged from poor to better-than-average in reading skills. Tutees were selected from the second grade because it was expected that a large age difference would enhance the sixth-grade children's sense of responsibility for their tutees. Tutees were assigned randomly to tutors with the restrictions that each tutee was not a sibling of his tutor and was of the same sex.

Experimental Design

A 3 x 2 x 2 factorial design was used (Pupil Imitation--Low, Medium and High; Pupil Liking--Medium and High; and Sex--Males and Females). An equal number of boys and girls were assigned randomly to each one of the six experimental conditions.

Materials

The tutoring materials were selected by the second-grade teachers. These materials consisted of lists of sight words at the appropriate level of difficulty for each second-grade student and reading games that required the use of these sight words. Tutors were responsible for recording which lists were mastered by their tutees.

Overview of Procedure

After two sessions of tutoring, tutors completed, in the presence of their pupils, an Opinion Form, which was to be used for the imitation manipulation. Tutors were told their pupils would complete an identical

form. Later each tutor was shown the Opinion Form supposedly completed by his pupil, but, in fact, filled out by the experimenter. The number of pupil responses that were identical to the tutor's responses was varied according to whether the tutor was in the Low, Medium, or High Imitation condition.

For the liking manipulation, tutors were shown a Tutor Evaluation Form, also supposedly completed by their pupils. The experimenter again had completed the responses on the form, this time to indicate either liking (for the Medium Liking condition) or extreme liking (High Liking) by the pupil for the tutor. (This procedure also insured that tutors received only positive feedback.)

Attitudinal and behavioral dependent measures were then obtained from the tutors.

Procedure

The study was conducted in an elementary school over a period of three weeks. Each week 24 tutors, divided into two groups of six males and two groups of six females, were scheduled to complete the entire tutoring and testing procedure. (Students who were absent during the week completed the procedure the next week.) Tutoring took place in the school cafeteria on two days, and on a third day the dependent measures were obtained.

All tutors followed the same procedure on the three days they participated in the study. On the first day, the experimenter and an assistant met with a group of six tutors of the same sex for orientation and training. After tutoring was described to them, these sixth graders

were asked if they wanted to be tutors, and all agreed that they did. After 20 minutes of training in tutoring techniques, the older students were introduced to their second-grade tutees and spent the next 20 minutes tutoring. All students then returned to their classrooms.

On the second day, sixth graders and their tutees met for another 20 minutes of tutoring. Then the tutoring materials were collected and the tutors were given the Opinion Form. This form, which was to be used for the imitation manipulation, consisted of 10 multiple-choice items asking for preferences in food, color, sports, and similar categories. Tutors were informed that their pupils would complete the same form immediately after the tutors had done so, and therefore the tutors should explain and demonstrate the procedure to their pupils as they went along. After the tutors completed the task and returned to their classrooms, the second graders were administered the form.

The tutees also completed at this time a Tutor Evaluation Questionnaire, a questionnaire constructed for the pupil liking manipulation that was to take place the next day. The questionnaire consisted of two items on seven-point scales that asked how much the pupil liked his tutor and how much he liked being tutored.

Experimental Manipulation

On the third day, the tutors and their pupils were assembled in a waiting room. Each tutor was brought individually into an adjacent room by the experimenter and shown his own Opinion Form and an Opinion Form and Tutor Evaluation Questionnaire supposedly completed by his pupil. In fact, the tutee's forms were replaced with forms completed

by the experimenter. This procedure made it possible to meet the needs of the experimental design and insured that all tutors would receive only positive feedback.

The manipulation of Pupil Imitation was accomplished by constructing the responses on the tutee's Opinion Form to agree differentially with the tutor's responses (which he had made in the presence of his tutee). Responses were made to be identical on either 30%, 70%, or 100% of the items, depending upon which imitation treatment condition the tutor was assigned to--Low, Medium, or High. To vary Pupil Liking, the experimenter marked the pupil's Tutor Evaluation Questionnaires either "I like my tutor" and "I like being tutored" (the fourth response on a seven-point scale) or "I like my tutor very, very, very much" and "I like being tutored very, very, very much" (the sixth response), depending on whether the tutor was in the Medium or High Pupil Liking condition. To increase the strength of the manipulation, the experimenter explicitly pointed out to the tutors whatever similarities existed in the responses to the two Opinion Forms (the tutor's and his pupil's), and with those tutors in the Medium and High Imitation conditions the experimenter discussed briefly the innocent tendency of younger children to imitate older children.

Dependent Measures

The tutor was then given the dependent measures. The attitudinal measure consisted of four items with multiple-choice answers on a seven-point scale. The questions were: "How much did you like your student?" "How much did you like tutoring?" "How happy are you right now?" and

"How happy are you with the way you are?" After these items were answered, the experimenter asked the tutor casually whether he thought his pupil had imitated some of his answers on the Opinion Form. This served as a check on the imitation manipulation and also provided an indication of the tutor's response to imitation in younger children (whether he perceived it positively or negatively).

Following this, a behavioral dependent measure was obtained. The tutee was called from the waiting room and accompanied his tutor to another room. An assistant there first praised both the older and younger student for their performance in the tutoring project, thanked them, and said they would receive from her five nickels each "as a token of our appreciation." She then said that if they wanted to they could contribute some or all of this money to UNICEF, and the nature of that organization was explained briefly. The assistant emphasized that the 25¢ each student was receiving was the student's money and she did not care what he did with it. The tutor received his money first, so he would have an opportunity to act as a model in making a contribution; then the tutee received his money to keep or to contribute. After the two students left for their classrooms, the amount contributed by each was recorded.

Results

Manipulation Check

The responses given to the experimenter by the tutors in the Medium and High Imitation conditions indicated that they did feel their students had been imitating their answers on the Opinion Form. Furthermore, the tutors did not say anything to suggest that they regarded this imitation with disfavor or as a form of academic "copying," rather, they tended to dismiss it with a laugh or a shrug.

Analysis

Data from the dependent measures were analyzed by a 3 x 2 x 2 least squares analysis of variance. Factors were Pupil Imitation (Low, Medium and High), Pupil Liking (Medium and High), and Sex (Males and Females).

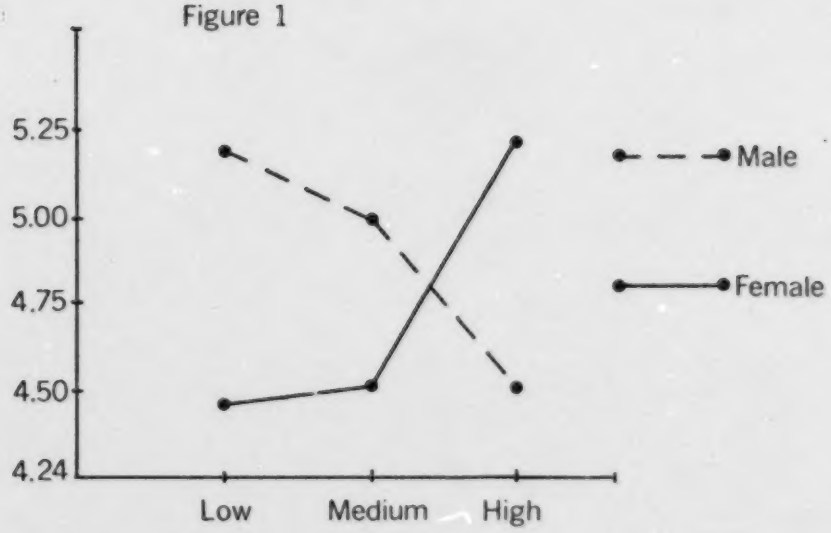
On the first attitudinal measure, amount of tutor liking for his pupil, a significant interaction was found between Imitation and Sex [$F(2,53) = 4.21$, $p < .02$]. No other effects or interactions were significant. The Imitation x Sex interaction indicates that the greater the pupils' imitation of them, the less male tutors liked their pupils and the more female tutors liked theirs. Figure 1 presents the means associated with this interaction.

Insert Figure 1 about here

As can be seen from Figure 1, with increasing imitation the male tutors show less liking for their pupils. The reverse is true for the female tutors: when their pupils imitate them to a low or medium extent, the girls like their pupils less than when imitated to a high extent. Duncan's multiple-range test was used to compare Low and High Imitation for each sex. The difference was significant for both the females ($p < .025$) and the males ($p < .05$).

On the item assessing mood, "How happy are you right now?" there was a significant interaction between Pupil Liking and Pupil Imitation [$F(2,53) = 3.22$, $p < .05$]. In the Medium Pupil Liking condition, the means were 4.18, 4.20 and 4.91 for increasing levels of Pupil Imitation, and for High Pupil Liking, the corresponding means were 5.00, 4.91 and 4.18. This indicates that tutors who believed they were

Figure 1



liked a medium amount by their tutees were happiest in the High Imitation condition, and tutors who believed they were highly liked were happiest in the Low and Medium Imitation conditions. No other main effects or interactions were significant.

The item assessing self-concept, "How much did you enjoy tutoring?" and the item, "How happy are you with the way you are?" did not differentiate among conditions.

The only significant result from the behavioral measure (the number of nickels tutors contributed to UNICEF in the presence of their tutees) was a trend ($p < .06$) towards an interaction between Liking and Imitation. The means for tutors in the Medium Liking condition were 3.00, 3.60 and 2.18 when the tutors believed they were imitated in the High Liking condition were 2.36, 1.45, and 3.00. These results make little theoretical or psychological sense and will not be discussed.

Discussion

The assertion that increased pupil imitation enhances the effect of being a model and results in attitudinal and behavioral changes in the tutor is only minimally supported by the findings. The study does confirm the hypothesis that a pupil's imitation affects the tutor's attitude toward that pupil. Although the female tutors seemed to prefer being highly imitated, the male tutors' response to imitation raises questions as to whether tutors may not in certain circumstances dislike being responded to as a model.

The difference in attitudes of boys and girls towards younger children who imitate them may be consistent with traditional sex roles. Studies indicate that females are higher in dependency, social passivity, and conformity than males (Mischel, 1970). Research on sex stereotypes

also shows that independence is considered to be a male trait (Rosenkrantz, Vogel, Bee, Broverman & Broverman, 1968) and conformity, a female trait (Nichols, 1962). Therefore, it may be that male tutors' role expectancies for their male pupils include the characteristic of independent behavior, and female tutors have the reverse expectancies for their female pupils. Since this study used only same-sex pairs, a replication using both same-sex and cross-sex pairs would be an appropriate extension. Such research could clarify whether elementary school boys prefer younger girls who imitate them more (as the role expectancy interpretation would predict) or whether the male tutors' own values of independence cause them always to prefer independent behavior. Similarly, the same relationship can be explored in relation to girls' reactions to male pupils.

The results suggest that, just as there is an optimal level of conformity for adults (Jones, et al., 1963), there may be an optimal level of imitation for children that varies depending upon the sex of the child. Relevant to tutoring programs, then, is the possibility that better relations may be fostered between male tutors and their male tutees when the tutees are allowed to perform occasionally in an independent manner. At present, these interactions are often limited to the tutor's eliciting specific, determined responses. Further research along these lines would be helpful.

The lack of any significant results from the behavioral dependent measure may be explained by the unfortunate timing of the study, which took place from November 27th through December 15th. With Christmas approaching, several of the participating students expressed dismay over the conflict that resulted from their wanting to contribute to

UNICEF and needing to save money to buy presents for family members. This undoubtedly lowered the amount of money contributed. It is also probable that some of the tutors, who otherwise might have donated more, felt they had a good excuse to use in front of their tutees.

The results suggest some interesting avenues for future research. At a time when there is an increased effort to understand sex differences and their effects on students, the educational importance of studies of this nature are clear. Their findings are relevant to two areas of educator concern: cross-age relationships between students of different sexes and, more specifically, procedures for implementing elementary school tutoring programs that are maximally beneficial to both tutor and tutee.

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